Functional Requirements Document (FRD)

# Project: Sales Analytics and Reporting

## 1. Introduction

The purpose of this Functional Requirements Document (FRD) is to outline and detail the system and functional requirements for the Sales Analytics and Reporting project. This project leverages SQL for backend data processing and Power BI for front-end dashboards to deliver business intelligence insights into customer behavior, sales performance, and product trends.

## 2. Functional Overview

The system should support data analysis and visualization across multiple sales dimensions. Functionalities include data querying, transformation, KPI generation, dashboarding, filtering, and report generation.

## 3. Functional Requirements

- The system must connect to the SQL Server database and run queries for sales data extraction.

- Users must be able to filter dashboards based on customer category, year, product category, and product segment.

- The system should calculate KPIs such as Total Sales, Total Orders, Average Order Value, and Monthly Spend.

- Power BI dashboards must visualize metrics such as sales trends, top customers/products, and segmentation.

- The data should be refreshed periodically or on-demand to ensure accurate and updated reporting.

- Users must be able to export dashboard visuals and data tables to CSV or PDF formats.

## 4. Data Requirements

The system requires access to the following data sources:  
- Sales transactions table  
- Customer demographics table  
- Product details table  
These datasets will be joined and aggregated for analysis and visualization.

## 5. Assumptions

It is assumed that the data provided is clean, normalized, and complete. SQL Server is accessible for queries, and Power BI is available for report generation.

## 6. Non-Functional Requirements

- The dashboard should load within 5 seconds.  
- Reports should be viewable on desktop and tablet devices.